



Call for Papers



The 1st ACM Workshop on
Future Industrial Communication Networks
(FICN 2018)

in conjunction with ACM MobiCom 2018

Friday, November 02, 2018

New Delhi, India

A robust, reliable, and intelligent communication network integrating both wired and wireless technologies forms the backbone of the 4th industrial revolution. Such systems, however, face a variety of challenges that range from realizing very large-scale networks to critical systems that require reliable and minimal latency in communication. Industrial networks are often required to support very low-data rate and low-power devices that are spread over tens of kilometers. On the other hand, many next generation networks will require to handle very high capacity traffic for applications that support virtual and augmented reality-based solutions. Moreover, due to mobility of workers (both humans and robots), mobile network communication (with or without infrastructure) also becomes critically important.

The ACM Future Industrial Communication Networks (FICN) workshop aims to address some of the challenges related to industrial communication networks. Importance will be given to solving real-life problems and cost-effective green solutions that can benefit emerging economies, startups, and small and medium enterprises. At ACM FICN, industry and academia shall come together to discuss challenges and cutting-edge research ideas, as well as establish a forward-looking collaborative relationship.

FICN seeks original, novel, and previously unpublished (and currently not under consideration anywhere else) papers that address the challenges faced by modern industrial networks. Submitted papers will be peer-reviewed by eminent members of the Technical Program Committee where technical merit, novelty, timeliness, and relevance to the workshop shall be considered.

Topics of interest to the ACM FICN workshop include, but are not limited to:

- Autonomous and intelligent intent-based networks
- Critical communication network and systems
- Industry 4.0 communication systems and related standards
- Green communication and battery-saving systems
- Large-scale sensor networks and industrial IoT (IIoT) applications
- 5G and industrial requirements
- Reliable and time sensitive networks

- Industrial applications of unmanned aerial vehicle (UAV) networks
- Heterogeneous networks involving modern and legacy (non IP-based) equipment
- Bid and design phases of communication networks (optimization & coverage)
- Low-power wide area machine-to-machine networks
- Software-defined networking (SDN) for industry
- Condition monitoring, analytics, and prognosis for industrial systems
- Cybersecurity: dissemination, identification, and defense against industrial malware/botnets
- Test-beds and real-life measurements for highly scalable industrial applications

Organizers

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Tentative Dates

- Workshop Paper Submissions Deadline: ~~June 10, 2018~~ June 29, 2018
- Acceptance Notification: July 20, 2018
- Camera-ready Workshop Papers Due: August 10, 2018
- Workshop Date: November 02, 2018

Submission Guidelines

Submitted papers must not exceed six (6) double-column pages (including figures, tables, references, and appendices, if any) and must follow the ACM MobiCom conference submission guidelines. The review process will be single-blinded, which means submitted papers must contain name(s) and affiliation(s) of all the authors. At least one author of each accepted paper need to register and present the paper at the workshop. All presented papers will be published in the proceedings of ACM MobiCom 2018 and will be available in the ACM Digital Library.

Visit <https://sigmobile.org/mobicom/2018/workshops/ficn/index.html> for further details. For any query, please send an email to the organizers with "FICN2018" in the subject line.

We look forward to meeting you at **ACM FICN 2018, New Delhi, India.**

